

VIALOX[®] NAV[®]-E SUPER 6Y[®]

Technical Information

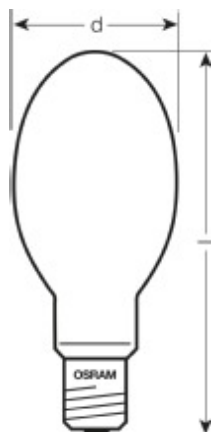


VIALOX[®] NAV[®]-E SUPER 6Y[®]

General product description

- High-pressure sodium vapor lamps
- ErP compliant (EU Regulation 245/2009)
- For open and closed luminaires

Basic technical description



Product reference	Nominal lamp wattage [W]	Cap	Correlated colour temperature [K]	Length max. (l) [mm]	Diameter (d) [mm]	Weight per piece [g]	Light centre length (a) [mm]	Typical lamp voltage ¹ [V]	Typical lamp current ¹ [A]
NAV-E 70W SUPER 6Y	70	E27	E27	156	71	52	n.a.	85	0.98
NAV-E 100W SUPER 6Y	100	E40	E40	183	76	80	n.a.	100	1.20
NAV-E 150W SUPER 6Y	150	E40	E40	226	91	177	n.a.	100	1.80

Performance specification¹

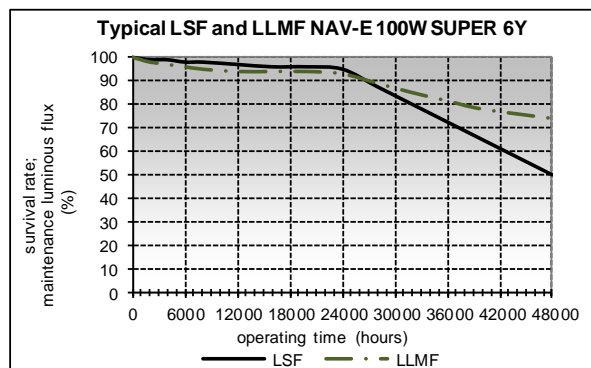
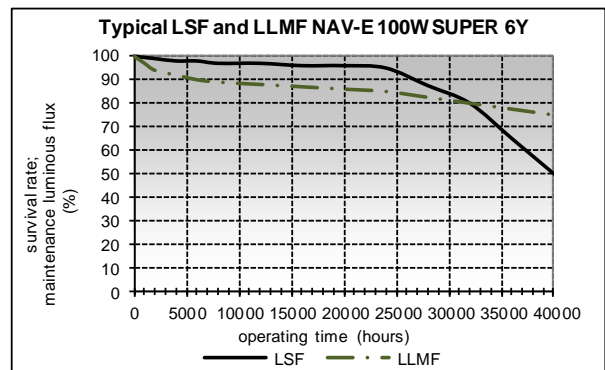
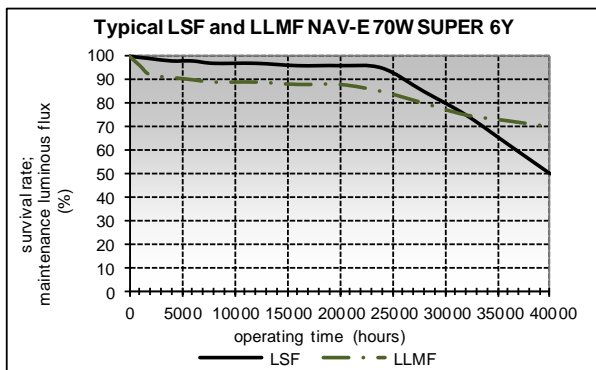
Product reference	Rated lamp wattage CCG/ECG [W]	Rated system wattage CCG/ECG ² [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Colour rendering index Ra	B5 [h]	B10 [h]	Average life (B50) [h]
NAV-E 70W SUPER 6Y	71 / 72	83 / 80	6300	90	≤ 20	24000	26000	40000
NAV-E 100W SUPER 6Y	100 / 100	115 / 106	10400	104	≤ 20	24000	28000	40000
NAV-E 150W SUPER 6Y	152 / 150	176 / 160	17000	112	≤ 20	24000	28000	48000

¹ Refers to operation with a reference electromagnetic ballast (IEC 60622).

² With OSRAM POWERTRONIC PTo

Product reference	Lamp lumen maintenance factor ³ (LLMF) vs. operation hours										
	2000h	4000h	6000h	8000h	12000h	16000h	20000h	24000h	32000h	40000h	48000h
NAV-E 70W SUPER 6Y	92%	91%	90%	89%	89%	88%	88%	85%	75%	70%	-
NAV-E 100W SUPER 6Y	94%	92%	90%	89%	88%	87%	86%	85%	80%	75%	-
NAV-E 150W SUPER 6Y	98%	97%	96%	95%	94%	94%	94%	93%	85%	78%	74%

Product reference	Lamp survival factor ⁴ (LSF) vs. operation hours										
	2000h	4000h	6000h	8000h	12000h	16000h	20000h	24000h	32000h	40000h	48000h
NAV-E 70W SUPER 6Y	99%	98%	98%	97%	97%	96%	96%	95%	75%	50%	-
NAV-E 100W SUPER 6Y	99%	98%	98%	97%	97%	96%	96%	95%	80%	50%	-
NAV-E 150W SUPER 6Y	99%	99%	98%	98%	97%	96%	96%	95%	80%	65%	50%



³ Indicates the percentage of luminous flux after a given period of operation time relative to the 100h values

⁴ Indicates the percentage of operational lamps after a given period of operation time.

Edition August 28, 2013; replaces edition May 29, 2013. Subject to change without notice. Errors and omissions excepted. Make sure to use the most recent edition.

Operation conditions

Product reference	Burning position	Max. permitted outer bulb temperature [°C]	Max. permitted base temperature [°C]	Ignition voltage min. ⁵ /max. ⁶ [kV]	Required control gear ⁷	Suitable OSRAM electronic control gear	Dimming
NAV-E 70W SUPER 6Y	universal	310	210	1.8 / 5.0	ECG, CCG	PTo	Yes
NAV-E 100W SUPER 6Y	universal	310	210	3.3 / 5.0	ECG, CCG	PTo	Yes
NAV-E 150W SUPER 6Y	universal	310	210	3.3 / 5.0	ECG, CCG	PTo	Yes

Safety, materials and environment

Product description	Typical mercury content [mg]
NAV-E 70W SUPER 6Y	17.0
NAV-E 100W SUPER 6Y	17.0
NAV-E 150W SUPER 6Y	21.0

- Compliant with safety specifications according to EN 62035
- Compliant with RoHS.

Energy labelling⁸

Product description	Energy efficiency class	Weighted energy consumption E _c [kWh/1000h]
NAV-E 70W SUPER 6Y	A+	77
NAV-E 100W SUPER 6Y	A+	110
NAV-E 150W SUPER 6Y	A+	168

Logistics data

Product description	ILCOS	EAN 10	EAN 40	Standard pack quantity
NAV-E 70W SUPER 6Y	SE-70/20/4-H/SL-E27-71/156	4008321843128	4008321843135	12
NAV-E 100W SUPER 6Y	SE-100/20/4-H/SL-E40-76/185	4008321843142	4008321843159	12
NAV-E 150W SUPER 6Y	SE-150/20/4-H/SL-E40-91/226	4008321843166	4008321843173	12

⁵ Minimum Ignition voltage according to IEC 60662

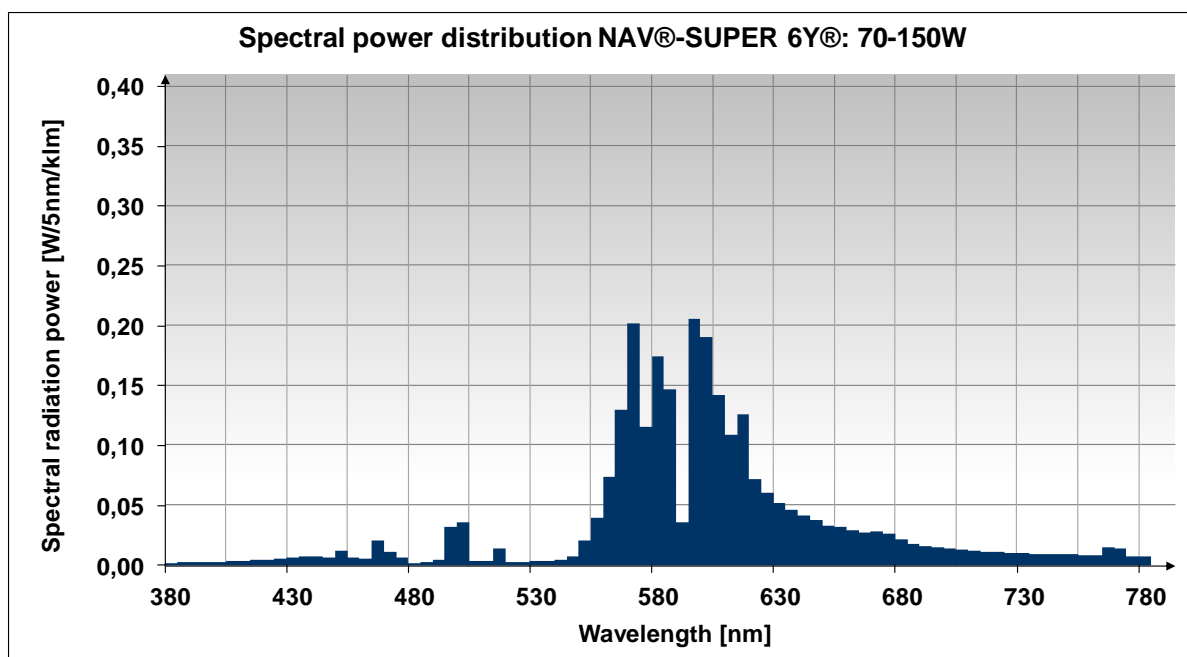
⁶ Maximum ignition voltage for the lamp

⁷ ECG stands for low frequency square wave electronic ballast, CCG stands for electromagnetic ballast according to IEC 61347

⁸ According to Regulation (EU) No 874/2012 of July 12, 2012

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Typical spectral power distribution



References

Reference	Location
Brochure "High Intensity Discharge lamps. Technical information on reducing the wattage"	www.osram.com
Ray data (e.g. ASAP, SPEOS, LightTools)	available on request
3D data (e.g. Parasolid, STEP)	available on request
System ⁺ guarantee	level 3C, see www.osram.com